



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,146	10/30/2003	Allan R. Overholt	CN0101 US DIV	1468

23906 7590 07/26/2005

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

JACKSON, MONIQUE R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,146

Applicant(s)

OVERHOLT ET AL.

Examiner

Monique R. Jackson

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 15-25 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed 4/29/05 has been entered. Claims 15-25 are pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/38244 (WO'244) for the reasons recited in the prior office action and restated below.

WO'244 teaches a plastic surface material having a bold and aesthetically pleasing appearance achieved by the use of TFR pigments formed by orienting reflective flakes in a thermosetting resin substrate and then grinding the substrate to a particulate material (Abstract, Page 3, lines 3-14.) WO'244 teaches that in a preferred process for making the TFR particles, conventional plastic, preferably curable polyester or acrylics are mixed together with conventional fillers, commonly used in the manufacture of FOUNTAINHEAD and CORIAN type products, such as those instantly claimed, together with a particular commercially available pigment which comprises small mica flakes of about 5-50 microns and having angstrom thickness metal oxide coatings on their surfaces (Page 3, lines 14-23.) WO'244 recites that after the coated mica flakes, optional fillers, optional conventional pigments for color, and uncured plastic are mixed together to form the TFR composition, curing (preferably complete curing) of the plastic is carried out in such a way as to cause the mica flakes to become oriented in particular orientation patterns (Page 3, lines 24-28.) WO'244 teaches that regardless of how orientation of the flakes is carried out, the cured product, e.g. in solid ribbon form, is then ground

Art Unit: 1773

to different particle sizes, to produce a granular TFR product, which translucent fire retardant particles are themselves used as an additive in the manufacture of the final products (Page 3, line 34-Page 4, line 3.) WO'244 further teaches that a wide variety of product appearances can be provided according to the invention: for example, using appropriate brown pigments, products having the appearance of burl wood are made (Page 4, lines 13-17.) In the manufacture of the final product, the TFRs become randomly reoriented to provide the final product, which has a somewhat pearlescent appearance; however, it is preferred that the composition of the final decorative product be passed through a die to orient parallel to the plane of the resultant product whatever raw coated flakes may be present in the composition (Page 5, lines 1-7.)

WO'244 also teaches that the oriented TFR particles may have various sizes wherein their size is limited by the thickness of the final product and the desired decorative effect (Page 4.) At Page 4, lines 18 to 27, *(the same section noted by the Applicant in the arguments filed 4/29/05)*, WO'244 recites that it is desirable to grind the "flake-containing solidified ribbon to provide TFR particles of reasonably large size, desirably on the order of at least 50 μ m of minimum dimension" and that there "is no limit on maximum size of such TFRs, except it is preferred that they be no larger than 5cm in their greatest dimension". WO'244 continues to state that the size of the TFR "is also limited by the thickness of the final product" and that "TFRs in any one final product can be provided in a variety of sizes simply by variable crushing of the cured ribbon." Hence, though WO'244 teach that it is preferred that the maximum dimension is 5 cm, ten times smaller than the instantly claimed lower limit of 50cm, WO'244 clearly teaches that there is no limit on the maximum size of the TFRs and that the size is dependent on the desired decorative effects of the final product. Further, WO'244 does not

Art Unit: 1773

specifically teach that the particles have an aspect ratio of at least three as instantly claimed, however, as previously recited, one having ordinary skill in the art at the time of the invention would have been motivated to determine the optimum particle size, shape, and aspect ratio to provide the desired decorative effect for a particular end use and further to incorporate conventional additives and colorants such as those instantly claimed in the invention taught by WP'244.

Response to Arguments

4. Applicant's arguments filed 4/29/05 have been fully considered but they are not persuasive. The Applicant argues that the instant claims are limited to fragments having a size in the range from 50 to 100cm while the cited reference teaches a much smaller preferred size of 5cm and hence alleges that one skilled in the art would not have taken a preferred size of 5 cm in a greatest dimension and multiplied it by a factor of 10 or 20 to obtain the instantly claimed range. However, the Applicant further argues that the large fragments result in a final decorative surfacing material having domains with shading variations along interfaces between adjacent domains and hence, it is clear that the size of the fragments result in a particular decorative affect. Though WO'244 recites that the preferred size is no larger than 5 cm, WO'244 does not limit the invention to this particle size and clearly teaches that the size of the ground ribbon is dependent upon the final product and the desired decorative effects. Hence, considering the instant invention provides no unexpected results in terms of utilizing the larger fragment size, the Examiner takes the position that one skilled in the art at the time of the invention would have

Art Unit: 1773

been motivated to determine the optimum fragment size above the lower 50 μm limit taught by WO'244 to provide the desired decorative effects for a particular end use.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

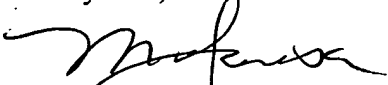
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Monique R. Jackson
Primary Examiner
Technology Center 1700
July 23, 2005